

Minutes of the discussion session of the First National Meeting on Science and Technology with SKA, 19-20 June 2012

The discussion was coordinated by I. Prandoni, who gave a short introductory presentation on behalf of L. Feretti and G. Vettolani. The presentation can be summarized by the following points:

- Aims at constituting an Italian SKA Science WG (reference person is L. Feretti). A call will be issued to the Italian community, asking for expression of interest to participate to such WG.
- Aim at preparing an Italian SKA White Book. Oral presentations given at this meeting can be used as a starting point.
- INAF intends to make this SKA national meeting a regular appointment.
- INAF encourages PhD/Postdoc working on SKA related topics.

Here are the main points raised by the community participating to the discussion:

1. It is important to get prepared to SKA, either by getting involved in observational projects for existing and/or forthcoming radio facilities (pathfinders and precursors), or through simulation/preparatory work for SKA phase 1 and 2. Also important is the exploitation of possible synergies with existing and forthcoming facilities working in different wavebands.
2. Interested people are invited to contact the PIs of the legacy projects for the SKA pathfinders and precursors to get involved. Timelines for the two precursors to get operational are 2013 for ASKAP and 2016 for Meerkat. Individual involvement is to be encouraged, but **it would be important to understand if precursors will become part of the SKA project (in kind contribution). In this latter case an involvement of Italy as a community could be negotiated.**
3. Is there a timeline for the Italian White Paper? The feeling is that this should be rapid, to be really effective. Before writing the White Book it is important to understand the use that INAF wants to do of it. **Is the White Book for internal use (Ministry)? For an international use? Or both?** In the first case the White Book should probably be written in Italian and should probably have an appealing graphical layout. In the second case it would be important to understand if the White Book should just reflect Italian scientific interests, or rather identify *missing science cases* to propose to the international SKA organization.
4. Important to organize SKA-related science areas of interest for the Italian community, explicitly indicating reference persons for a better coordination. Also important is to include SKA-related technical development and public outreach. It

would be useful to keep Magnetic Fields and Cosmic Rays topics together in science case.

5. **Is there room for new SKA-related science cases?** The main SKA science drivers (see SKA Science Book, 2004) have been defined. However it is clear that many other science areas can be addressed by the SKA. In the next future a sort of 'science assessment call for proposal' will be issued by the international SKA organization, in order to have a broad overview of the existing scientific interests of the overall international community, with particular respect to SKA phase 1. This may lead to something similar to the 'Design Reference Science Plan" produced for the ALMA project.
6. It is suggested that "schools" are organized, so as to allow a broader community to obtain real experience with radio interferometric data (in a similar way to what done for ALMA).
7. Both the preparation of an Italian White Book and the assembling of SKA working groups is a bottom-up approach. **Does INAF have a (top-down) strategy to increase the Italian involvement in SKA?**
8. **Is an Operation Plan for the SKA already available? Does INAF have a position in this respect?**
9. To significantly increase the Italian community science engagement with SKA precursors and pathfinders, through PhD projects and or Postdoc positions, **it would be important to get dedicated funding for SKA science exploitation. What is INAF policy in this respect?**
10. In addition to observational programs with pathfinders and precursors, theoretical projects should be supported as well. These are crucial to drive the final SKA specs, and in this area Italy is well behind other countries.
11. **Is there any funding from MIUR? How this would be channeled to the community?** Through INAF, through Universities (e.g. PRIN-MIUR), through external funding programs issued by the MIUR?
12. **Is there possibility to get EU funding on SKA-related projects? Is ESKAC going to coordinate such a funding?** Higher chances do probably exist by focusing on science rather than on instrumentation.
13. There is major concern on how SKA-related funding will be managed and distributed. **It is advisable that a sort of 'Advisory Committee' would be set up by INAF for SKA-related fund distribution. This is felt as an important requirement by the community,** in order to make the Italian involvement in SKA as broad as possible and successful.
14. **The Advisory Board could be useful also to coordinate the SKA-related scientific activity of the Italian community** (White Book, 'science assessment call for proposal', etc.), **as well as SKA-related workshops, schools and courses** (together with Universities). To some extent similarities and synergies with the Italian ALMA Regional Center node are present, that could be exploited.